

C1 D1
Conced

overlap and underlap contact forming an interlocking joint, each segment comprising at least one packet of said strips having edges.

2. (Twice Amended) A core segment comprising a plurality of packets of cut amorphous metal strips, said strips each having ends forming an overlap and underlap interlocking joint, and said strips each having edges.

REMARKS

Claims 1, 7, 8 and 14-25 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite. Applicants have now amended independent claim 1 to recite a final product as required by the Office Action. Withdrawal of the rejection under 35 U.S.C. 112 is therefore respectfully requested.

Claims 1-5, 7-9, 14 and 19 were rejected under 35 U.S.C. 103(a) as being unpatentable over Olsen in view of Klappert et al. The Examiner has pointed out features of each of these claims that she maintains are found in Olsen. Applicants disagree that Olsen discloses the features in each of these claims. Independent claim 1, as amended, now includes the recitation "a plurality of segments of amorphous metal strips, said strips each having ends that are in overlap and underlap contact forming an interlocking joint" (emphasis added). This amendment is supported in the Specification on page 7, lines 9-11 and in Figures 4, 8 and 9. Nowhere in Olsen is there a teaching or suggestion of this claimed structure. Olsen instead teaches a core having butted or gapped joints made up of solid grain-oriented magnetic material (see column 2, lines 53-55). It can clearly be seen from Fig. 5 in Olsen that there are gaps between the ends of laminations (such as 43) in the transformer core. These gaps are discussed generally in the specification at column 4, lines 4-30. Such butted or gapped joints made from solid material are inapplicable to more flexible amorphous metal material, and would cause unacceptable magnetic losses in the core. These transformer losses are obvious because the magnetic flux must jump over or around the gaps in Olsen's butted or gapped joints creating inefficiencies. Because Olsen could not have known about amorphous metal alloys in 1968, which was many years before this type of alloy was invented, he could not anticipate the unique problems associated with forming joints of amorphous material. In contrast the structure of the present invention is different than Olsen's structure, resulting in much lower transformer losses. In the present invention the ends of strips forming group 20 (Figures 2 and 3) sit on top of the corresponding ends of the opposite side of group 20 forming a continuous magnetic loop with no gaps (see Figures 8 and 9).

Klappert et al. was cited for their teaching of packets of amorphous metal strips for transformer core manufacture. However, even if the teachings in Klappert are combined with the teachings in Olsen the resultant structure would not meet applicants' structure as now claimed. Furthermore, the problems faced by Klappert were much different than those faced by Olsen. Klappert (like applicants) faced sensitive materials handling issues inherent in amorphous metal transformer manufacturing. It would have been unlikely for one skilled in the art to look to the teachings in Olsen of butted or

gapped joints made from solid material, and combine these teachings with Klappert to arrive at applicants' invention. Accordingly, applicants submit that amended claim 1 is patentable over the combination of Olsen and Klappert.

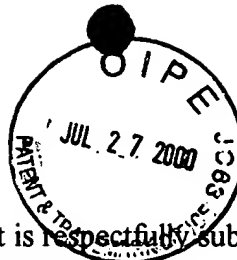
It is well established that the mere fact that references can be combined does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. ACS Hospital Systems, Inc. v. Montefiore Hospital, 732 F2d 1572 (CAFC 1984). Moreover, the mere fact that it is possible for two or more isolated disclosures to be combined does not render the result of that combination obvious absent a logical reason of record which justifies the combination. In re Regel et al., 526 F2d 1399 (CCPA 1975). Applicants therefore respectfully submit that claim 1, as amended, is patentable over the combination of references cited.

Dependent claims 7, 8, 9, 14 and 19 are also submitted as being patentable over the combination of Olsen and Klappert like claim 1. Applicants wish to point out with regard to the rejection of claims 7 and 19, Olsen doesn't disclose that the edges of each segment are coated with a bonding material for protection and increased strength as described and claimed by applicants. Instead, Olsen describes and claims in claim 7, "wherein the ends of the laminations are coated with a smooth adherent material." (emphasis added) This coating is provided to minimize the friction between the laminations when the two halves of the transformer core are joined together and do not protect the edges and provide increased mechanical strength as in the present invention..

Independent claim 2, as amended, and dependent claims 3-5 are similarly submitted as being patentable over the combination of Olsen and Klappert for the same reasons as discussed above with respect to claim 1.

In view of the above remarks applicants submit that the various rejections of dependent claims 6, 15-18, 20, 21-24 and 25-26 under 35 U.S.C.103(a) based on the combination of Olsen and Klappert et al taken alone, or further combined with Lee et al., Granfield or Ames et al., have been obviated. Each of these claims depend from either claim 1 or claim 2, and thus are also patentable for the reasons stated above. Furthermore, the combination of Olsen with Klappert et al. further combined with either Lee et al., Granfield or Ames et al. would not be proper. The Federal Circuit has stated that there must be something in the reference to suggest the desirability of the proposed combination. In re Grabiak, 226 USPQ 870 (Fed. Cir. 1985). The absence of a suggestion to combine is dispositive. Cambro Lundia AB v. Baxter Healthcare Corp., 42 USPQ2d 1378 (fed. Cir. 1997).

CONCLUSION



In view of the above amendments and remarks, it is respectfully submitted that all of the remaining claims are patentable and in condition for allowance. Reconsideration of the various rejections of the claims and their allowance are earnestly solicited. Should the Examiner consider that discussion with the applicants' representative would be helpful to resolve any issues in this case, such a discussion would be welcomed.

Respectfully submitted,

D. Nathasingh, et al.

By: 

Aaron Nerenberg

Reg. No. 27,064

(973)455-3930

127396

RECEIVED

JUL 31 2000
TECHNOLOGY CENTER 2800